ABSTRACT

The present invention involves a system for automatically screening closed circuit television (CCTV) cameras for large and small scale security systems, as used for example in parking garages. The system includes six primary software elements, each of which performs a unique function within the operation of the security system to provide intelligent camera selection for operators, resulting in a marked decrease of operator fatigue in a CCTV system. Real-time image analysis of video data is performed wherein a single pass of a video frame produces a terrain map which contains parameters indicating the content of the video. Based on the parameters of the terrain map, the system is able to make decisions about which camera an operator should view based on the presence and activity of vehicles and pedestrians, furthermore, discriminating vehicle traffic from pedestrian traffic. The system is compatible with existing CCTV (closed circuit television) systems and is comprised of modular elements to facilitate integration and upgrades.